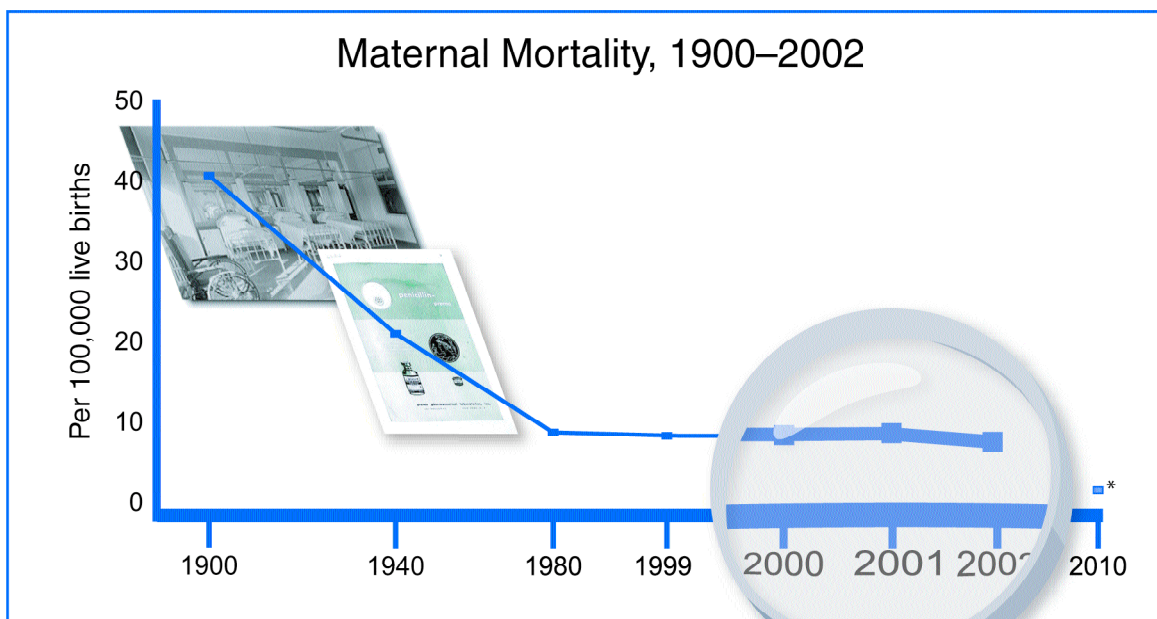


Safe Motherhood

Promoting Health for Women Before, During, and After Pregnancy

2005



* The national *Healthy People 2010* objective is to reduce maternal deaths to 3.3 per 100,000 live births.

“Five years into the 21st century, it appears that we will miss the nation’s Healthy People 2010 objective for reducing maternal mortality. Mothers who are healthy and safe give their infants the very best start. This is the most important step in building healthy families, active communities, and a strong United States.”

Wanda K. Jones, DrPH
Deputy Assistant Secretary for Health (Women’s Health)
Director, Office on Women’s Health, U.S. Public Health Service

Safeguarding the Health of Mothers

Safe motherhood begins before conception with proper nutrition and a healthy lifestyle. It continues with appropriate prenatal care, the prevention of complications when possible, and the early and effective treatment of any complications that do occur. The ideal result is a labor at term without unnecessary interventions, the delivery of a healthy infant, and a healthy postpartum period in a positive environment that supports the physical and emotional needs of the woman, infant, and family.

No Decline in Deaths in 20 Years

In the United States, 2–3 women die of pregnancy complications each day. From 1900 to 1982, deaths from pregnancy complications in the United States declined dramatically. In 1982, deaths began to level off, and there has been no marked decrease since that time. Yet studies indicate that as many as half of all deaths from pregnancy complications could be prevented if women had better access to health care, received better quality of care, and made changes in their health and lifestyle habits.

The leading causes of pregnancy-related deaths today are hemorrhage, blood clot, high blood pressure, infection, stroke, amniotic fluid in the bloodstream, and heart muscle disease. Antibiotics and infection control have helped to prevent many pregnancy-related deaths over the past century.

Complications Are Costly

Complications before delivery account for more than 2 million hospital days of care and over \$1 billion each year in the United States. These figures would be even higher if they included complications that occur during and after delivery.

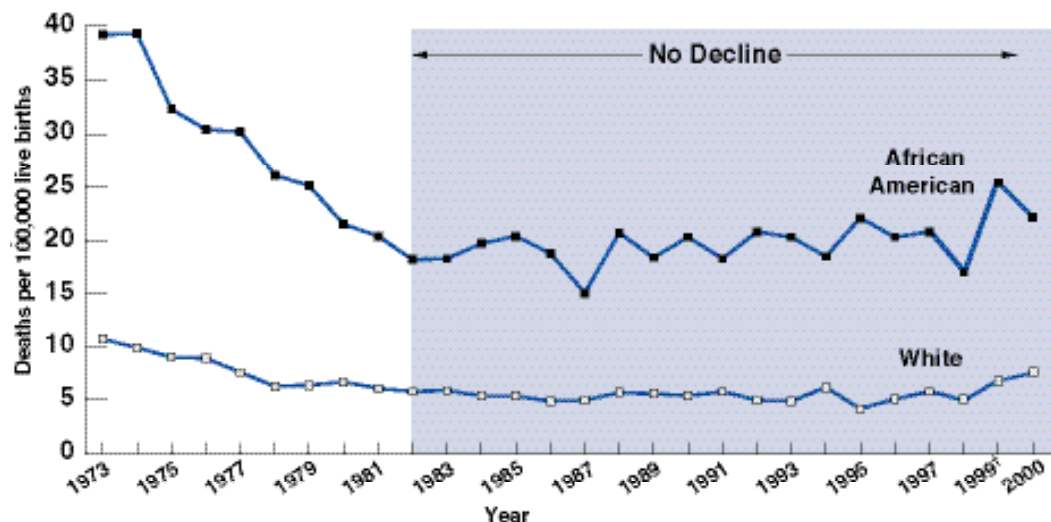
CDC also is working on additional science-based strategies that aim to prevent even more of these deaths.

Large Racial, Ethnic, and Age Disparities

A woman's race, ethnicity, country of birth, and age are associated with her risk of dying of pregnancy complications. For example,

- The risk of death for African American women is almost four times that for white women.
- The risk of death for Asian and Pacific Islander women who immigrated to the United States is two times higher than the risk for Asian and Pacific Islander women born in the United States.
- The risk of death is nearly three times greater for women aged 35–39 years than for women aged 20–24 years. The risk is five times greater for women over 40.

African American and White Women Who Died of Pregnancy Complications, United States, 1973–2000*



* Annual number of deaths during pregnancy or within 42 days after delivery, per 100,000 live births.

† The apparent increase in the number of maternal deaths between 1998 and 1999 is the result of changes in how maternal deaths are classified and coded.

Source: CDC, National Center for Health Statistics.

CDC's National Leadership

CDC is committed to ensuring that all people achieve their optimal lifespan with the best possible quality of health in every stage of life. With a number of important new health impact goals, CDC is setting the agenda to enable the American people to enjoy a healthy life by delaying death and the onset of illness and disability. In addition, CDC works to eliminate disparities by accelerating improvements for those at the greatest risk of poor health.

Tracking the Data

CDC provides leadership for gathering accurate and useful data, and it works continually to improve data collection methods. Good data provide the framework for effective action and can be used to monitor emerging health topics such as assisted reproductive technology.

Pregnancy Mortality Surveillance System (PMSS)

Through the PMSS, CDC works with state health departments and other organizations to identify and gather information on pregnancy-related deaths. At the national level, CDC uses PMSS data to examine

- Trends in pregnancy-related deaths.
- Risk factors for pregnancy-related deaths.
- Racial, ethnic, and age disparities in pregnancy-related death rates.
- Specific conditions that lead to death.

To collect these data, states must determine whether a woman died during or within a year of pregnancy. Data from all 50 states, the District of Columbia, and New York City are collected, combined, and used to describe pregnancy-related deaths in the United States.

Maternal Mortality Review Committees

Some states have created maternal mortality review committees to review and find ways to prevent pregnancy-related deaths. To help all states benefit from the expertise and experience of these committees, CDC is collaborating with the Maternal and Child Health Bureau of the Health Resources and Services Administration (HRSA), the American College of Obstetricians and Gynecologists (ACOG), the Association of Maternal and Child Health Programs, and representatives from nine states to publish promising practices for improving this process. CDC also collaborated with the World Health Organization and international researchers to publish *Beyond the Numbers: Reviewing Maternal Deaths and Pregnancy Complications to Make Pregnancy Safer*.

Pregnancy Risk Assessment Monitoring System (PRAMS)

CDC and the states use PRAMS to collect data on women's behaviors and experiences before, during, and immediately after pregnancy. PRAMS surveys are conducted in 29 states and New York City and cover 62% of all U.S. births. (See map on page 4.) The data help to identify groups of women at high risk for health problems, monitor changes in their health status, and measure progress in improving the health of mothers and infants.

PRAMS data are used primarily by states to

- Set priorities for reproductive public health programs and services.
- Guide and justify decisions to modify state health policies.
- Advocate for new programs in maternal and child health.
- Identify new resources for public health programs and services.

Conducting Innovative Research

Each year, about 4 million U.S. women give birth. While many women experience normal pregnancies without problems, about 1 million women have one or more complications during pregnancy, labor and delivery, or the postpartum period. These complications can range from mild to life-threatening. Defining and counting these complications is critical for public health researchers to understand the magnitude of the problem, monitor changes in its scope, and identify prevention strategies and areas that need special attention. CDC is leading an effort to collect information on the most serious pregnancy complications by supporting research to describe the continuum of women's health during pregnancy, including problem-free pregnancies as well as those with serious complications and those that result in death.

Smokeless Tobacco Use During Pregnancy

In response to the growing perception that using smokeless tobacco is safer than smoking, CDC is exploring the effects of smokeless tobacco use on pregnancy. Previous research on the safety of smokeless tobacco has not included pregnant women. An analysis of Swedish birth registry data suggests that smokeless tobacco use during pregnancy may be associated with increased risk for preterm delivery and pre-eclampsia. CDC is conducting similar research in parts of the United States where rates of smokeless tobacco use among women are high. Understanding the effects of smokeless tobacco use on pregnancy will increase our knowledge of how tobacco exposure harms pregnant women and their infants.

CDC's Partnerships to Promote Safe Motherhood

Perinatal Depression

In 2004, the Safe Motherhood Working Group, a U.S. Department of Health and Human Services group led by the Office on Women's Health, convened the National Perinatal Depression Collaborators Meeting. Researchers, clinicians, program experts, policy makers, and advocates discussed ways to better identify and treat perinatal depression. In 2005, the group released a report on the incidence and prevalence of perinatal depression during pregnancy and the postpartum period, the accuracy of screening tools, and the potential effects of screening and interventions.

Smoking and Maternal and Child Health

Smoking during pregnancy is the single most preventable cause of illness and death for mothers and infants. CDC's Maternal and Child Health Smoking-Attributable Mortality, Morbidity, and Economic Costs is a Web-based program that can estimate the number of smoking-attributable deaths, the years of potential life lost, and the cost of health care for infants with illnesses related to maternal smoking.

Sudden Infant Death Syndrome (SIDS)

SIDS is the leading cause of death for U.S. infants aged 1–12 months. Although the national rate has declined over 50% since 1990, rates for non-Hispanic black and American Indian infants are higher than those for non-Hispanic white infants. CDC is investigating reasons for these racial disparities and is collaborating with experts to improve the accuracy and consistency of SIDS diagnoses.

Health Needs of American Indians, Alaska Natives, and Native Hawaiians (AI/AN/NH)

AI/AN/NH women are at greater risk for pregnancy complications and adverse pregnancy outcomes than most U.S. women. CDC is collaborating with the Indian Health Service, AI/AN/NH leaders, and other partners to lower this risk by conducting activities and developing research to improve the health of AI/AN/NH women and children.

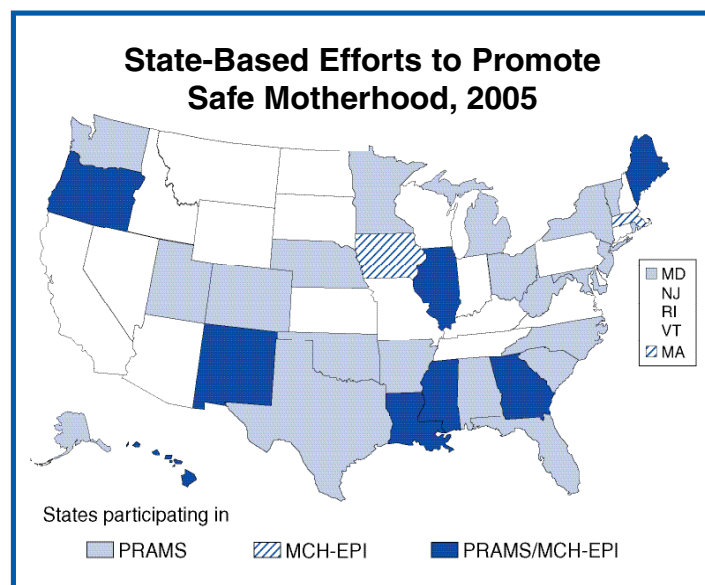
Health Needs of Latina Women

During the 1990s, Latinas had the highest fertility and live birth rates of any U.S. demographic group. Safe motherhood

indicators for Latina women highlight the need to identify and target vulnerable subgroups. CDC is working to better integrate Latina-focused research and programs domestically and along the U.S.–Mexico border.

Maternal and Child Health Epidemiology Program (MCH-EPI)

MCH-EPI helps state and local health departments strengthen their ability to collect, analyze, and use data to develop health policies and programs for women, children, and families. This HRSA/CDC program provides epidemiologists to 10 states and the Northwest Portland Indian Health Board.



Future Directions

CDC will continue to expand surveillance efforts to provide consistent data and information about all states, including adding states as CDC works to achieve nationwide coverage of PRAMS. CDC is committed to ensuring that states have the information they need to address the full range of reproductive health issues—from promoting positive pregnancy outcomes to providing the science base for comprehensive maternal and child health programs. CDC will provide technical assistance to states, including the dissemination of promising practices and proven approaches related to preconception care and maternal and child health.

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